<u>**AMENDMENTS**</u>

This listing of claims will replace all prior versions, and listings, of claims in the application:

<u>**Listing of Claims:**</u>

1.   **(withdrawn)**   An image processing apparatus comprising:

        a) input means for inputting image data;

        b) first coding means for coding the input image data by transforming the input image data into frequency components in units of blocks and coding said frequency components by adaptively using an intracoding mode and an intercoding mode;

        c) second coding means for coding frequency components obtained by limiting said frequency components for reference image data for use in the intercoding mode; and

        d) multiplexing means for outputting combined data obtained by combining the image data coded by said second coding means with the image data coded by said first coding means.

2.   **(withdrawn)**   An image processing apparatus according to claim 1, wherein said second coding means performs coding on only direct-current components obtained by limiting said frequency components.

3.   **(withdrawn)**   An image processing apparatus according to claim 1, wherein said first coding means and said second coding means use an MPEG-4 standard to code the image data.

4.   **(withdrawn)**   An image processing apparatus according to claim 3, wherein said multiplexing means locates the image data coded by said second coding means in a user data area in a video plane object in a stream of the combined data output by said multiplexing means.

5.   (**withdrawn**)   An image processing apparatus according to claim 1, wherein said multiplexing means combines the image data coded by said second coding means with a stream of the image data coded in the intercoding mode by said first coding means.

6.   (**withdrawn**)   An image processing apparatus according to claim 1, wherein the image data coded by said second coding means is used as a reference image when the image data intercoded by said first coding means is decoded.

7.   (**currently amended**)   An image processing apparatus comprising:

an input unit configured to input image data;

a first coding unit configured to encode, in an intracoding mode, the input image data by transforming the input image data into frequency components in units of blocks and coding said frequency components in an intracoding mode;

a second coding unit configured to encode, in an intercoding mode, the input image data using reference image data which is obtained by performing local decoding on the image data encoded by said first coding unit in an intercoding mode;

a storing unit configured to store the reference image data;

a pseudo-coded reference image data generating unit configured to generate pseudo-coded reference image data by coding limiting the frequency components obtained by the transforming of the input image data in the first coding unit limiting frequency components which are stored in the storing unit, wherein said pseudo-coded reference image data is used to correct a frame of image data encoded by the second coding unit in a case where the frame of image data encoded by the second coding unit cannot be decoded in a decoding process;

a switching unit configured to output the pseudo-coded reference data generated by said pseudo-coded reference image data generating unit when coding is performed in the intercoding mode; and

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a multiplexing unit configured to output a stream of multiplexed data obtained by storing the pseudo-coded reference image data outputted by the switching unit into a user data area in a video plane object in a stream of the image data encoded by the [[first]] second coding unit in a case where the coding is performed in the intercoding mode, and to output a stream of data in which the pseudo-coded image reference data is not stored in a case where the coding is performed in the intracoding mode.

8.   (**previously presented**)   An image processing apparatus according to claim 7, wherein said pseudo-coded reference data generating unit performs coding on only direct-current components obtained by limiting said frequency components.

9.   (**previously presented**)   An image processing apparatus according to claim 7, wherein said first coding unit and said pseudo-coded reference data generating unit use an MPEG-4 standard to code the image data.

10.   (**canceled**)

11.   (**canceled**)

12.   (**previously presented**)   An image processing apparatus according to claim 7, wherein the pseudo-coded reference data is used as a reference image when the image data coded in the intercoding mode by said first coding unit is decoded.

13.   (**withdrawn**) An image processing apparatus comprising:

        a) input means for inputting coded image data obtained by performing transformation into frequency components in units of blocks and coding the frequency components by adaptively using an intracoding mode and an intercoding mode, and pseudo-coded reference data obtained by coding frequency components obtained by limiting said frequency components for reference image data for use in the intercoding mode;

b) first decoding means for decoding the coded image data input by said input means; and

c) second decoding means for decoding the pseudo-coded reference data input by said input means,

wherein, when a reference image is lost in decoding on the image data coded in the intercoding mode, said first decoding means uses, as the reference image, image data obtained such that said second decoding means decodes the pseudo-coded reference data.

14.   (**withdrawn**)   An image processing apparatus according to claim 13, further comprising error detecting means for performing error detection on the coded image data input by said input means, and when said error detecting means detects an error in a frame of the input coded image data, said error detecting means skips over the error-detected frame.

15.   (**withdrawn**)   An image processing apparatus according to claim 13, wherein the pseudo-coded data of reference is located in a stream of image data which is coded in the intercoding mode by using corresponding reference image data.

16.   (**withdrawn**)   An image processing apparatus according to claim 13, wherein:

said input means inputs motion-vector data used in coding in the intercoding mode; and

when the reference image is lost in decoding on the image data coded in the intercoding mode, said first decoding means uses, as the reference image, image data which is based on the input motion-vector data and which is obtained such that said second decoding means decodes the pseudo-coded reference data.

17.   (**withdrawn**)   An image processing apparatus according to claim 13, wherein the coded image data input by said input means is image data coded in an MPEG-4 standard.

18.   (**withdrawn**) An image processing method comprising:

        a) an input step of inputting image data;

        b) a first coding step of coding the input image data by transforming the input
image data into frequency components in units of blocks and coding said frequency
components by adaptively using an intracoding mode and an intercoding mode;

        c) a second coding step of coding frequency components obtained by limiting said
frequency components for reference image data for use in the intercoding mode; and

        d) a multiplexing step of outputting combined data obtained by combining the
image data coded in said second coding step with the image data coded in said first
coding step.

19.   (**currently amended**)   An image processing method for performing by an image
        processing apparatus including a multiplexing unit and a storing unit, the image
        processing method comprising:

        an input step of inputting image data;

        a first coding step of encoding the input image data by transforming the input
image data into frequency components in units of blocks and coding said frequency
components in an intracoding mode;

        a second coding step of encoding the input image data using reference <u>image </u>data
which is obtained by performing local decoding on the image data encoded in said first
coding step in an intercoding mode;

        a storing step of storing the reference <u>image </u>data in the storing unit;

        a pseudo-coded reference data generating step of generating pseudo-coded <u>image</u>
reference data by ~~coding~~ <u>limiting </u>frequency components obtained by<u> the transforming of</u>
<u>the input image data in the first coding step</u> ~~limiting frequency components which are~~
~~stored in the storing unit~~<u>, wherein said pseudo-coded reference image data is used to</u>
<u>correct a frame of image data encoded by the second coding step in a case where the</u>

frame of image data encoded by the second coding step cannot be decoded in a decoding process;

a switching step of outputting the pseudo-coded reference image data generated by the pseudo-coded reference image data generating step when coding is performed in the intercoding mode; and

a multiplexing step, performed by the multiplexing unit, of outputting a stream of multiplexed data obtained by storing the pseudo-coded reference image data outputted in the switching step into a user data area in a video plane object in a stream of the image data encoded in the [[first]] second coding step in a case where the coding is performed in the intercoding mode, and to output a stream of data in which the pseudo-coded reference image data is not stored in a case where the coding is performed in the intracoding mode.

20.   (**withdrawn**)   An image processing method comprising:

a) an input step of inputting coded image data obtained by performing transformation into frequency components in units of blocks and coding the frequency components by adaptively using an intracoding mode and an intercoding mode, and pseudo-coded reference data obtained by coding frequency components obtained by limiting said frequency components for reference image data for use in the intercoding mode;

b) a first decoding step of decoding the coded image data input in said input step; and

c) a second decoding step of decoding the pseudo-coded reference data input in said input step,

wherein, when a reference image is lost in decoding on the image data coded in the intercoding mode, in said first decoding step, image data obtained by decoding the pseudo-coded reference data in said second decoding step is used as the reference image.

21.   (**withdrawn**) A computer-readable recording medium containing computer program code comprising:

      a) an input step code of inputting image data;

      b) a first coding step code of coding the input image data by transforming the input image data into frequency components in units of blocks and coding said frequency components by adaptively using an intracoding mode and an intercoding mode;

      c) a second coding step code of coding frequency components obtained by limiting said frequency components for reference image data for use in the intercoding mode; and

      d) a multiplexing step code of outputting combined data obtained by combining the image data coded by said second coding step code with the image data coded by said first coding step code.

22.   (**currently amended**) A computer-readable recording medium containing computer program code comprising:

      input code for inputting image data;

      first coding code for encoding, in an intracoding mode, the input image data by transforming the input image data into frequency components in units of blocks and coding said frequency components in an intracoding mode;

      second coding code for encoding, in an intercoding mode, the input image data using reference image data which is obtained by performing local decoding on the image data encoded in said first coding step in an intercoding mode;

      storing code for storing the reference image data in a storing unit;

      pseudo-coded reference image data generating code for generating pseudo-coded reference image data by coding limiting the frequency components obtained by the transforming of the input image data in the first coding code limiting frequency components which are stored in the storing unit, wherein said pseudo-coded reference image data is used to correct a frame of image data encoded by the second coding code in

a case where the frame of image data encoded by the second coding code cannot be decoded in a decoding process;

switching code for outputting the pseudo-coded reference image data generated by said pseudo-coded reference image data generating [[step]] code when coding is performed in the intercoding mode; and

multiplexing code for outputting a stream of multiplexed data obtained by storing the pseudo-coded reference image data outputted in the switching step into a user data area in a video plane object in a stream of the image data encoded in the [[first]] second coding [[step]] code in a case where the coding is performed in the intercoding mode, and to output a stream of data in which the pseudo-coded reference image data is not stored in a case where the coding is performed in the intracoding mode.

23.   (**withdrawn**)   A computer-readable recording medium containing computer program code comprising:

a) an input step code of inputting coded image data obtained by performing transformation into frequency components in units of blocks and coding the frequency components by adaptively using an intracoding mode and an intercoding mode, and pseudo-coded reference data obtained by coding frequency components obtained by limiting said frequency components for reference image data for use in the intercoding mode;

b) a first decoding step code of decoding the coded image data input by said input step code; and

c) a second decoding step code of decoding the pseudo-coded reference data input by said input step code,

wherein, when a reference image is lost in decoding on the image data coded in the intercoding mode, image data obtained by decoding the pseudo-coded reference data in said second decoding step is used as the reference image by said first decoding step code.